

IDEA-0498-67

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26 July 1967

MEMORANDUM FOR THE RECORD

SUBJECT : U-2R Model Spec Revision

Numerous changes to the configuration and the capability of the U-2R are reflected in the recent complete revision to the model spec dated 1 July 1967. The more significant changes are noted as follows:

1. Para. 3.1.2.1 - The take-off gross weight has increased 634 pounds. The only significant performance impact is a reduction of 240 n.m. in range for the maximum range mission at the design gross weight and a reduction of 363 n.m. at the overload gross weight condition. This range degradation is a result of the increased gross weight, a revised engine performance specification and additional wind tunnel test results. Significantly, the maximum altitude mission is essentially unaffected.

2. Para. 3.2.5 - The tail pipe has been added to the interchangeable list and folding wing tips and the scoop leading edge assembly have been added to the list of replaceable items.

3. Para. 3.4.2 - The "shifted" configuration now consists of a symmetrical deflection of the flaps of approximately  $6\frac{1}{2}^{\circ}$  up and of the ailerons of approximately  $7\frac{1}{2}^{\circ}$ . These deflections previously were  $4^{\circ}$  and  $10^{\circ}$  respectively.

4. Para. 3.5.1 - Basic internal structural provisions for droppable stores are now included in the wing group.

5. Fig. 6 - The center of gravity has shifted aft approximately 1% from the previous position and at certain gross weights, it is now very near the aft limit.

6. Para. 3.6.1 - The horizontal tail trim travel has been increased from  $4^{\circ}$  to  $5^{\circ}$ .

7. Para. 3.12.9.7 - The fuel feed line strainer assembly has been changed from 60 mesh to 200 mesh.

USAF review(s) completed.

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8. Para. 3.13.1 - Two 50 ampere-hour batteries for emergency electrical power are now used in lieu of one 25 ampere-hour battery.

9. Para. 3.16.1.1 - In-flight ventilation of the full pressure suit will now be provided.

10. Para. 3.17.1.5 - Two 28 channel recorders in lieu of one recorder will now be installed to automatically record specific aircraft and mission equipment signals. The pilot's UMY-20 recorder installation has been deleted.

11. Para. 3.17.1.6 - Provisions for VHF-101 radio communications are now included.

[REDACTED]

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13. Para. 3.17.2.4 - The [REDACTED] has replaced the [REDACTED]

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14. Para. 3.17.2.6 - The [REDACTED] has been added.

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[REDACTED]

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ASD/R&D/OSA

ASD/R&D/OS [REDACTED] sjs (26 July 1967)

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[REDACTED]

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